

## ABSTRACT

A novel asymmetric filter membrane, and process for making is disclosed in several exemplary versions. The membrane structure is physically robust and suitable for use in a wide variety of applications. The support membrane is may be comprised of material such as a porous silicon or a silicon oxide, and the separation membrane may be comprised of material such as a polymer, zeolite film, or silicon oxide. The process relies on steps adapted from the microelectronics industry.